





PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference TO114PCT	FOR EUDTHER ACTION OF TOUR CONTINUE OF TRAISMILLE OF MICHAELONIAL				
International application No.	International filing date (day/		Priority date (day/month/year)		
PCT/JP2003/008916	14 July 2003 (14.07	.2003)	15 July 2002 (15.07.2002)		
International Patent Classification (IPC) or no G02B 6/38	ational classification and IPC .				
Applicant	TOMOEGAWA PAPER	CO., LTD.			
 This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36. 					
2. This REPORT consists of a total of	This REPORT consists of a total of5 sheets, including this cover sheet.				
This report is also accompanie amended and are the basis for	This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).				
These annexes consist of a tot	These annexes consist of a total of sheets.				
3. This report contains indications relati	3. This report contains indications relating to the following items:				
I Basis of the report					
II Priority	II Priority				
III Non-establishment or	III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
IV 🔀 Lack of unity of inve	ntion		·		
V Reasoned statement to citations and explana	Lack of unity of invention Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
VI Certain documents ci	VI Certain documents cited				
VII Certain defects in the	in the international application				
VIII Certain observations					
-	·				
Date of submission of the demand		Date of completion of this report			
14 July 2003 (14.07.2003)		14 January 2004 (14.01.2004)			
Name and mailing address of the IPEA/JP	Authori	zed officer			
Facsimile No.	simile No. Telephone No.				



Internal application No.

PCT/JP2003/008916

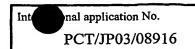
I.	Basis	of the re	port	
1.	With	regard to	the elements of the international application:*	
		the inte	rnational application as originally filed	
	茵	the desc	cription:	
		pages	1-21	, as originally filed
		pages		, filed with the demand
		pages	, filed with the letter of	
	\square	Al Al-1		
		the clair	2 (7 0 12 16	, as originally filed
		pages	2, 6, 7, 9, 12-16 , as amended (together	er with any statement under Article 19
		pages pages	, as anomos (rogen.	, filed with the demand
		pages	1, 3-5, 8, 10-11 , filed with the letter of	· · · · · · · · · · · · · · · · · · ·
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		pages	· 1-39	, as originally filed
		pages		, filed with the demand
		pages	, filed with the letter of	
	☐ t	he seque	nce listing part of the description:	
		pages		, as originally filed
		pages		, filed with the demand
		pages	, filed with the letter of	
2.	the in	nternation e elemen the lang the lang	guage of a translation furnished for the purposes of international search (under Figuage of publication of the international application (under Rule 48.3(b)). In guage of the translation furnished for the purposes of international preliminar	which is:
3.	With prelin	minary ex	to any nucleotide and/or amino acid sequence disclosed in the internation was carried out on the basis of the sequence listing: ned in the international application in written form.	ational application, the international
		filed to	gether with the international application in computer readable form.	
		furnish	ed subsequently to this Authority in written form.	
		furnish	ed subsequently to this Authority in computer readable form.	
		interna	catement that the subsequently furnished written sequence listing does not ational application as filed has been furnished. atement that the information recorded in computer readable form is identical	
			ımished.	
4.		_	nendments have resulted in the cancellation of:	
			the description, pages	
			the claims, Nos.	
			the drawings, sheets/fig	
5.			port has been established as if (some of) the amendments had not been made, the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	since they have been considered to go
*	in th	icement : is report 70.17).	sheets which have been furnished to the receiving Office in response to an invi- t as "originally filed" and are not annexed to this report since they do r	tation under Article 14 are referred to not contain amendments (Rule 70.16
**			ent sheet containing such amendments must be referred to under item $\it l$ and ann	nexed to this report.



Internal application No.
PCT/JP03/08916

IV. Lack of unity of invention
1. In response to the invitation to restrict or pay additional fees the applicant has:
restricted the claims.
paid additional fees.
paid additional fees under protest.
neither restricted nor paid additional fees.
2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
complied with.
not complied with for the following reasons:
The "special technical feature" of claims 1-9 and 11-16 relate to "plugs, each having an optical fiber inserted in it, are installed into an adaptor in the direction perpendicular to the axial direction of the optical fibers." The "special technical feature" of claim 10 relates to "after the plugs have been installed in the adaptor, guide pins are inserted from through holes of the adaptor into through holes of the plugs." Since there is no technical relationship among these inventions involving one or more of the same or corresponding technical features, these inventions are not considered to be so linked as to form a single general inventive concept.
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 Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
all parts.
the parts relating to claims Nos





V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Statement			
Novelty (N)	Claims	2, 4-10, 12-13, 15-16	YES
	Claims	1, 3, 11, 14	NO
Inventive step (IS)	Claims	5-7, 12-13, 15	YES
	Claims	1-4, 8-11, 14, 16	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

2. Citations and explanations

Document 1: JP, 59-157605, A (Fujitsu Ltd.), 7 September, 1984 (07.09.84), full text, all drawings

Document 2: JP, 3-60402, B2 (Fujitsu Ltd.), 13 September, 1991 (13.09.91), full text, all drawings

Document 3: JP, 1-51808, B2 (Fujitsu Ltd.), 6 November, 1989 (06.11.89), page 2, left column, line 22 to page 2, right column, line 18, Fig. 2

Document 4: JP, 6-222245, A (Sumitomo Electric Industries, Ltd.), 12 August, 1994 (12.08.94), full text, all drawings

Document 5: US, 5838856, A (Daewoo Telecom, Ltd.), 17 November, 1998 (17.11.98), column 3, lines 21-31, column 3, lines 44-53, column 3, line 62 to column 4, line 14, Figs. 3, 4, 9, 11 and 12

Claims 1, 3 and 11

The "aligning member 12" of the invention described in document 1 corresponds to the "plug" of the subject matters of claims 1, 3 and 11. Furthermore, the "aligning board 6" and "optical fiber aligning board 4" of the invention described in document 3 respectively correspond to the "adaptor" and "plug" of the subject matters of claims 1, 3 and 11. In the inventions described in documents 1-3, two plugs can be individually installed into an adaptor in the direction perpendicular to the axial direction of optical fibers. So, the subject matters of claims 1, 3 and 11 do not appear to be novel in view of documents 1-3.

Claims 2, 8 and 9

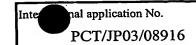
The subject matters of claims 2, 8 and 9 do not appear to involve an inventive step in view of documents 1-3. Since the fixing by means of latches is well-known and commonly used, a person skilled in the art could have easily conceived of fixing the plugs to the adaptor by means of latches.

Claims 4 and 10

The subject matters of claims 4 and 10 are different from the inventions described in documents 1-3 in the following constitution. In the former, after the plugs have been installed in the adaptor, the guide pins are inserted from the through holes of the adaptor into the through holes of the plug, for fixing the plugs to the adaptor. However, in the latter, such guide pins are not used.

Document 4 describes that guide pins (pressure pins 15) are inserted from through holes of an adaptor (housing 11) into through holes of plugs (optical connectors 22), for fixing the plugs to the adaptor. A person skilled in the art could have easily conceived of applying the above-mentioned matter of document 4 to the inventions described in documents 1-3, to arrive at the subject matters of claims 4 and 10.





Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V.2

Claim 14

The "alignment member" described in document 5 corresponds to the "ferrule aligning member" of the subject matter of claim 14. Since the invention described in document 5 has all the steps described in claim 14, the subject matter of claim 14 does not appear to be novel in view of document 5.

A plug having plural ferrules is employed as required, and a person skilled in the art could have easily conceived of it.

Claims 5-7

The subject matters of claims 5-7 appear to involve an inventive step in view of documents 1-5. Documents 1-5 do not describe an optical fiber connecting structure in which two plugs can be individually installed into an adaptor in the direction perpendicular to the axial direction of optical fibers, characterized in that after the plugs have been installed into the adaptor, a ferrule aligning member is made to be capable of sliding relative to the ferrules of the plugs. A person skilled in the art could not have easily conceived of this constitution either.

Claims 12 and 13

The subject matters of claims 12 and 13 appear to involve an inventive step in view of documents 1-5. Documents 1-5 do not describe that after a guide pin has been inserted into through holes of respective plugs, (1) the respective plugs are disposed to face each other, and (2) another guide pin is inserted into a through hole of an adaptor from one end of the adaptor, for pressing in the guide pin inserted beforehand, thereby fixing the plugs to the adaptor. A person skilled in the art could not have easily conceived of this constitution either.

Claim 15

The subject matter of claim 15 appears to involve an inventive step in view of documents 1-5. Documents 1-5 do not describe the constitution in which a ferrule aligning member is installed in an adaptor beforehand. A person skilled in the art could not have easily conceived of this constitution either.